

ABSTRACT

A system and method of demodulating antenna data containing multiple signals in multiple protocols for multiple users is disclosed. The method comprises buffering the antenna data with an input buffer of the demodulation system. Next, the protocol to be demodulated is determined and a dynamically reconfigurable datapath for the system is configured for that protocol. The antenna data containing multiple signals is read from the input buffer, demodulated by the datapath, and stored in an output buffer. The next protocol to be demodulated is determined and the datapath is configured appropriately. Again, the signal for each of the users is demodulated by the datapath and the output data is stored in the output buffer. This process continues until all of the signals for all of the users have been demodulated for all of the prescribed protocols.

09742811.121900